

“My tutor doesn’t say that”: The legitimized voices in dialogic reflection on teaching practices



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Abstract

In the construction of teachers’ professional knowledge, reflective practices are a fundamental tool that responds to the need to connect theoretical principles with practical resources and to the improvement of teaching by means of critical analysis. The Practicum, as a dialogic structure for the explanation and interpretation of teaching practices, provides teachers in training an opportunity to build their own understanding based on dialogue and reflection. Invocation is one of the resources used to legitimize scientific or disciplinary knowledge in joint reflection. Qualified voices are called and made present in classroom discourse to validate descriptions or explanations. We are interested in defining the profile of the invocations introduced in dialogic reflection, as sources of legitimation of knowledge, and identify the patterns in the sequence of the invocations’ appearance. This work consists of an exploratory study of multiple cases, in which each case is a classroom unit composed of a tutor and her student teachers. Two cases from the Practicum in a Primary Education Teacher Degree were selected. A category system was developed for the analysis of invocations and organized into four dimensions: academic or professional knowledge, experiential knowledge, invocation of truth, and invocation of ideology or values. Results allow us to highlight some relevant conclusions. Invocations are a widespread resource in a process of dialogic reflection to legitimize the interpretation of educational practices. The participation of student teachers in dialogic reflection is possible and abundant thanks to the experience of the Practicum, which provides a validity criterion for their arguments, supported by the invocation to the authority of teaching experiences. In this study, tutors’ efforts to connect pedagogical principles with personal experiences in the Practicum have not clearly translated into student reflections in the same direction. The paper finishes paying attention to the competencies and training that Practicum tutors need.

Keywords: invocations, dialogic reflection, reflective practices, Practicum, teacher training, discourse analysis, qualitative research, case study

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Introduction

In the construction of teachers’ professional knowledge, reflective and dialogic practices are a fundamental tool that responds to the need to connect theoretical principles with practical resources and to the improvement of teaching by means of critical analysis (Clarà & Mauri, 2010; Cubero-Pérez, Cubero & Bascón, 2019; Feiman-Nemser, 2001; Mauri, Cubero, Bascón, Colomina, Cubero, Jiménez & Usabiaga, 2015). The development of professional practical knowledge (Fenstermacher, 1994; Schon, 1983) supported by the teaching experiences of teachers in training has been examined from a variety of strategies (Darling-Hammond, 2017; Korthagen, 2010), with intervention in Practicum being one of the pillars on which recent research is based.

The Practicum provides teachers in training an opportunity to build their own understanding of teaching based on dialogue and reflection on the practical dilemmas found in their practice (Cuenca, 2010). We think, then, of teacher training as an activity situated in specific cultural practices, where student teachers develop an identity, appropriate a discourse and methods to define problems, which will allow them to be active members of their community of practice (Matusov & Hayes, 2002). A crucial fundamental element in the Practicum is the figure of the academic tutor, a socializing agent, a figure that supports and legitimizes the construction of knowledge about teaching (Cubero-Pérez, Cubero & Bascón, 2019; Cuenca, 2011).

Tutors develop a fundamental role in legitimizing professional knowledge and, at the same time, conferring legitimacy on students in the teaching community, accepting their contributions in an expert discourse, and helping them feel like teachers (Feiman-Nemser, 2008). But teacher education based on practical knowledge requires more than just telling teachers in training how or what to teach (Cuenca, 2010). Taking into consideration the importance of the tutor in the legitimization of practices and the socialization of teachers in educational intervention, the selection and training of the tutors becomes a fundamental aspect of the curricula (Cuenca, 2011; Dinkelman, Margolis & Sikkegna, 2006).

Invocation is one of the resources used in classroom dialogue to legitimize scientific or disciplinary knowledge (Cubero & Ignacio, 2011). We call invocation the resource consisting of expressing statements that rely on and take as reference different elements of academic knowledge and / or personal experience of speakers. The elements of that academic knowledge or that personal experience that are introduced in classroom discourse are used as justification for the versions that are exposed in the classroom. Thus, a qualified voice is called and made present in the dialogic teaching process, relating it to a specific description or explanation.

The analysis of invocation as an argumentative process allows us to investigate how the relevant sources of knowledge are established in dialogic interactions in the classroom, and how empirical facts and theories that count as valid are constructed. Relating the use of this resource with our theoretical approaches, since learning implies appropriating a specific discourse, a form of activity in which the meaning of the experience is constructed with words (Lemke, 1990), the investigation of invocations shows the way in which academic knowledge is constructed versus everyday knowledge or other types of knowledge (Candela, 1999; Edwards, 1993; Hatano & Inagaki, 1991). This analysis, in addition, deepens in the uses of discourse according to some own rules of the formal educative contexts (Edwards, 1993; Edwards & Mercer, 1987; Candela, 1999), as well as in the use of the criteria that science uses to legitimize a certain explanation instead of other possible ones. Therefore, the legitimate versions of the events offered or built in the classroom are those that are expected to become the knowledge shared by the classroom community. In this sense, the analysis of the resource called invocation collaborates in the explanation of how a shared knowledge is constructed in dialogic classrooms. Also, taking up the argument of the importance of the selection and training of the tutors of the Practicum, the analysis of the invocations allows to define an intervention profile in which the tutor contributes to the socialization of the students in the teaching practices through the participation in the legitimization of their own practices.

Regarding the functions of the invocation, we can affirm that they are: 1) establish knowledge as a valid version, as a scientific, academic or culturally acceptable description-explanation; 2) offer elements that support and justify a certain version of knowledge; 3) define or describe a situation (concept, explanation, activity, experience) in the classroom; 4) control and / or direct an activity or experience that takes place in the classroom; 5) and display the criteria that science, discipline or experience use to legitimize a given explanation instead of other possible ones (Cubero & Ignacio, 2011).

Invocations are closely related to the concept of Bakhtin's voice (1981, 1986) and to the dialogic structure of discourse. The analysis of educational discourse reveals that it is polyphonic and that it contains numerous voices which refer to different perspectives and movements in the process of knowledge construction, as well as different roles played by the teachers and students (Cubero & Ignacio, 2011). Cazden (1993) and Wertsch (1900, 1991) have paid special attention to the concept of Bakhtin's voice in relation to the school context, since the school presents some voices as better or as privileged forms compared to other discursive forms. Being respected, being heard in a classroom implies speaking with the

voice of truth (that of official science, for example). A voice that is used by the teacher to establish the truth and hold a position of authority. On the other hand, the invocation as a resource to build a valid and culturally accepted explanation is related to other resources that appear in the dialogue and reflection of the classroom. Candela has described the classroom as a place where legitimized versions of the facts are constructed, which through the intervention of the teaching staff aspire to be shared knowledge. Some of these discursive procedures through which the legitimacy of knowledge is established are argumentation, the search for consensus, analogies, the recourse to perceptual evidence and the authority of specialists (Candela, 1999).

Through the analysis of discourse in these studies it is shown how scientific facts are constructed in the classroom. The author is also interested in analyzing the active role of students in these processes, who use their experience to participate in the dynamics of the classroom, whether or not they are invited to do so. The demand for answers by teachers can cause a type of student participation focused on the elements of teacher's discourse - on the clues she gives, the examples she uses, the way she talks about the facts - but on other occasions it is essential that students contribute with their experience and meanings, and thus be part of the classroom discourse (Candela, 1999; Cubero-Pérez, Cubero & Bascón, 2019). Faced with the argumentative activity of the students, teachers can perform different movements. They can block students' access to shared classroom dialogue, for example, when they do not incorporate their ideas into joint construction. Teachers can also incorporate the students' arguments into the discussion, identifying them as a valid source of authority and leaving different possibilities of understanding open, without there being a single legitimate version of knowledge, but rather a plurality of authorized voices (Candela, 1999).

In this study we are interested in the joint reflection which is developed in the subject of Practicum, as a dialogic structure for the explanation and interpretation of teaching practices. Also, in the framework of this reflection, we are interested in the study of invocation as a means of legitimizing what and how to teach. This will allow us not only to describe the sources of validation, but to contrast epistemologically different types of knowledge, and to explore the agency of teachers in training in the definition and resolution of the dilemmas posed by educational intervention. The specific objectives of this study are to define the profile of the invocations introduced in dialogic reflection and identify the patterns in the sequence of the invocations' appearance.

Method

Participants

This study is part of a largest research project entitled *“Aid for the construction of knowledge in the Practicum of teachers: Joint reflection to improve the theory-practice relationship”* (<http://www.mineco.gob.es/>). It consists of an exploratory study of multiple cases (Yin, 2009), in which each case is a classroom unit composed of a tutor and her student teachers. Concretely, two cases were selected (named case F and case H). These are two classroom units that were integrated into the activities developed in the subject of the Practicum in a Primary Education Teacher Degree. These were composed of a tutor and 15 students, and a tutor and 9 students, respectively.

Materials

The proposed activity was that student teachers individually wrote a description of a situation experienced in their teaching pre-service practices. The situation should be described avoiding interpretations and would be lately discussed in the Practicum classroom. Table 1 shows the content/topic

of each situation described by student teachers. It should be noted how in case F the number of situations treated is doubled (2 in each session), compared to case H.

Table 1. Contents/topics of the situations described by student teachers in a written narrative.

CASE F	CASE H
s1. Controversy over the decision of the management team regarding children repeating grades.	s1. Controversy over the decision of the management team regarding children repeating grades.
s2. Refusal of the parents of a child with Down Syndrome to receive support from the school.	s2. Differences between the teacher and the student teacher about working with an ADHD child.
s3. Measures a teacher takes with a child who lies by saying that she receives threats from two classmates.	s3. Discrepancy between the teacher and a mother about the inappropriate behavior of a child in classes.
s4. Xenophobic behavior of a child and decisions taken by the school.	s4. Conflict resolution by a teacher in a fight between three children, one of them with ADHD.
s5. Learning problems of a girl with an unstructured family due to parental divorce.	s5. A teacher withdraws the ABN method of teaching mathematics by cognitive dissonance.
s6. A child who needs reinforcement classes outside the classroom.	
s7. Discrepancy between a teacher and the parents of a child with behavioral and school problems.	
s8. Collaborative work agreement between the teacher and the parents of a violent and aggressive child.	
s9. A child with special educational needs that is inadequately treated due to lack of resources.	
s10. A child with low performance and following a program to reinforce learning and integration in the classroom.	

Procedure

The study consisted of several phases:

Phase I. Tutor’s and cases selection. In this study, we selected those cases that we believed would provide the most abundant information on educational aids. The sample selection process corresponds to what Goetz and LeCompte (1984) call criterion-based selection and Patton (1980) calls purposeful sampling. For the selection of the tutors, and therefore of the case studies, an initial in-depth interview was carried out, in order to explore their didactic and teaching strategies as well as the importance given to reflection within them. Their interest and predisposition to participate in a project of this nature were also

taken into account. Likewise, according to the methodological approach of the study, the choice of tutors was based on the fact that they are promoters of good educational practices and with extensive teaching experience in the Practicum, according to the assessment from the university's on teaching staff.

Phase II. The activity in the classroom was intended to help students connect their experience in school practice with academic knowledge, through joint reflection between the students themselves and the tutor. Thus, previously to the seminar, the students had to write individually a situation that they had experienced in their practices and that would have particularly caught their attention. The situation should be described as literally as possible, trying to avoid interpretations. More specifically, seminars were held with the students and the tutor starting with the reading of the situations by the student who had written it; in each session a student or several were responsible for presenting theirs. Then the conversation was opened to the group for dialogic reflection. The 5 sessions in which the activity of dialogic reflection between the tutors and the student teachers, of approximately one and a half hours duration, were recorded in video and audio for each case study.

Phase III. Once the tutorials were concluded, a final interview was held with each tutor to collect their impressions of how the groups functioned, problems they had encountered, suggestions and their degree of satisfaction, etc.

The data corresponding to Phase II, that is the tutor-students' interactions during the seminars sessions, is analyzed and shown in this study. We would like to make an observation about the nature of the method and the results. In case studies, the generalization of the data to broader contexts is not based on a statistically representative random sample, but rather on the deepening of a case or a small number of cases (Descombe, 2010; Gerring, 2007; Giménez, 2012 ; Ragin and Becker, 1992; Yin, 2009). Since our interest is to be able to explain not only what happens in a specific case, but what this implies for the explanation of teacher training processes, the cases have been selected based on their analytical generalization (Yin, 2009) according to the criteria for strategic selection of critical and typical cases (Descombe, 2010; Fkysbjerg, 2001). Thus, the generalization of the results does not refer to the concrete frequencies, but the conceptual model that emerges from the analysis. Our study, therefore, aims to successfully analyze a small number of cases and develop a model that can be extended and serves to analyze the construction of professional knowledge during the Practicum.

Category System

The data processing and its organization were carried out through the use of a category system based on previous studies (Cubero & Ignacio, 2011) and reworked specifically for the research project to which this work belongs. The unit of analysis that was used for the coding and delimitation of discursive extracts was the turn of intervention of each participant in classroom dialogue.

The category system was developed for the analysis of invocations or knowledge validation sources. These categories are organized into 4 dimensions: academic or professional knowledge, experiential knowledge, invocation of truth, and invocation of ideology or values (Table 2). The first refers to interventions that introduce the voice of academic or professional knowledge in dialogic reflection as a way to establish the correct knowledge or what counts as the correct one. The second includes the interventions through which the individual, collective or cultural experience of the participants are introduced. The third includes assertions that appeal to absolute truths, which are considered expressions of truth, and sometimes do not incorporate an empirical argument or justification. Finally, the fourth dimension contains ideological issues related to a specific value system.

“My tutor doesn’t say that”: The legitimized voices in dialogic reflection on teaching practices

Mercedes Cubero, Miguel Jesús Bascón, Rosario Cubero-Pérez

Table 2. Invocations or knowledge validation sources categories system (summary description).

Invocations to authority of	Definitions	Examples
Academic or professional knowledge		
IAD Academic discipline	Utterances that take as reference theories, areas of knowledge, or scientific disciplines.	<i>This idea has been proposed by Cognitive Psychology.</i>
IAA Autor or professional group	Utterances that take as a reference particular individuals or professional groups perspectives with mastery of academic knowledge.	<i>But Vygotsky defended the social origin of thinking...</i>
IAM Teacher in the school for professional or teaching practices	Utterances that take as a reference the perspective of the teachers in the schools, who are recognized as experts with professional or pragmatic knowledge.	<i>In the school I go for teaching practices, my tutor has told me that with parents you have to be careful to introduce any teaching innovation.</i>
IAC Formalized Knowledge	Utterances that take as a reference technical terms that are recognized as formal or academic vocabulary.	<i>This is what we call in Psychology the Zone of Proximal Development.</i>
IAGP Formalized knowledge of the group-session	Utterances that takes as a reference technical terms which are generated from the experience of the group-session (11.89%).	<i>Here, in all these examples that you have been explaining, we can see something that is some kind of conceptual framework of the teacher.</i>
Experiential knowledge		
IEI Participant's individual experience	Utterances that take as a reference the everyday practice events/experience of the participant.	<i>My friends who study sciences, laugh when I told them that Pedagogy is also a science.</i>
IEG Group-session experience	Utterances that take as a reference a collective idea which is shared by the participants because it has been generated in classroom microcosm and dialogue.	<i>As Hugo is saying, and we defended before, I believe that we have to create the conflict.</i>

“My tutor doesn’t say that”: The legitimized voices in dialogic reflection on teaching practices

Mercedes Cubero, Miguel Jesús Bascón, Rosario Cubero-Pérez

IEP Experience on the didactic-educational practice in classroom contexts	Utterances that take as a reference events related to the educational experience of participants, which could be experienced with other groups of students or in previous degrees.	<i>I knew a teacher who always sat the worst children near her table.</i>
IEC Cultural experience of the participant or the classroom group	Utterances that take as a reference everyday knowledge shared by and established in a cultural group.	<i>It is known by the community that if a student disconnect from the subject, when she wants to return, it is too late.</i>
Truth		
IVE Related to present experiences	Utterances that take as a reference an assertion on the nature or description of an object or process. The assertion is based on a direct real-time experience and it is considered and expression of truth.	<i>If I shout loudly right now (and she shouts) you get scared, you see?</i>
IVN Not related to present experiences	Utterances that take as a reference an assertion on the nature or description of an object or process. The utterance is not related to current direct experiences and it is considered and expression of truth. It is included in discourse without the need for any proof or argument in favor.	<i>You can't educate a child without punishing him when he needs it.</i>
Ideology and values		
IIV Ideology or value system	Utterances that take as a reference the perspective of specific value systems or ideologies that are explicitly mentioned.	<i>The right to education is a right for all children, as stated in the Human Rights Letter.</i>

In the process of developing the category system, the categories were verified by each team member (three members), in several re-readings of the transcripts. The different categories identified by each member were shared and described to establish an emerging list of them, combining or dividing them

according to their best ability to explain the discursive process. This mechanism involves an iterative process between created categories and re-analysis until obtaining a network of them by saturation (Clarke, 2005). Finally, a procedure was carried out to establish the reliability of the category system between observers (Cohen's kappa coefficient over 0.87; Cohen, 1960).

Analysis and results

The treatment of the data carried out corresponds to the identification of the invocations in two complete work sessions of the two Practicum tutors and their respective student teachers. The sessions analyzed are the first and fifth sessions, with the aim of contrasting the intervention resources used. The calculations were made based on the frequency and percentage of each category.

The results are described according to the specific objectives set out in the introduction. First, the case F data are shown, and after the case H ones.

Results of case F

In the overall profile of invocations (Table 3) the most used have been those referred to the authority of academic or professional knowledge (40.56%), followed by invocations to experiential knowledge (32.87%) and invocations to the truth (22.38 %).

Table 3. Overall profile of invocations in case F.

INVOCATIONS	<i>f</i>	%
IAD Authority of academic discipline	2	1.40
IAA Authority of the author or professional group	13	9.09
IAM Authority of the school teacher	11	7.69
IAC Formalized Knowledge	15	10.49
IAGP Formalized knowledge of the group-session	17	11.89
IA Academic or professional knowledge	58	40.56
IEI. Participant's individual experience	3	2.10
IEG Group-session experience	1	0.70
IEP Experience on the didactic-educational practice in classroom	37	25.87
IEC Cultural experience of the participant or classroom group	6	4.20
IE. Experiential knowledge	47	32.87
IVE Related to present experiences	6	4.20
IVN Not related to present experiences	26	18.18
IV. Truth	32	22.38
IIV Ideology or value system	6	4.20
IIV Ideology and values	6	4.20
TOTAL	143	100

In relation to the most used concrete categories, we highlight the invocations to the experience on the didactic-educational practice (25.87%), followed by the invocations to the truth not related to present

experience (18.18%) and the invocations to the formalized knowledge generated from the experience of the group-session (11.89%).

This profile of invocations is different when analyzing separately the interventions of the Practicum tutor and the student teachers (Table 4).

Table 4. Profile of invocations used by the Practicum tutor and the student teachers in case F, separately.

INVOCATIONS	Tutor		Student teachers	
	<i>f</i>	%	<i>f</i>	%
IAD Authority of academic discipline	1	2.56	1	0.96
IAA Authority of the author or professional group	11	28.21	2	1.92
IAM Authority of the school teacher	---	---	11	10.58
IAC Formalized Knowledge	6	15.38	9	8.65
IAGP Formalized knowledge of the group-session	15	38.46	2	1.92
IA Academic or professional knowledge	33	84.62	25	24.04
IEI Participant's individual experience	---	---	3	2.88
IEG Group-session experience	1	2.56	---	---
IEP Experience on the didactic-educational practice in classroom	---	---	37	35.58
IEC Cultural experience of the participant or classroom group	1	2.56	5	4.81
IE. Experiential knowledge	2	5.13	45	43.27
IVE Related to present experiences	1	2.56	5	4.81
IVN Not related to present experiences	1	2.56	25	17.48
IV. Truth	2	5.13	30	28.85
IIV Ideology or value system	2	5.13	4	3.85
IIV Ideology and values	2	5.13	4	3.85
TOTAL	39	100	104	100

The Practicum tutor uses, almost exclusively, invocations in the authority of academic or professional knowledge dimension (84.62%). The most frequent categories in this dimension have been the invocations to the knowledge generated from the experience of the group-session (38.46%) and the invocation to the authority of the expert –an author or professional group- (28.21%). Both categories of invocations are almost exclusively present in the tutor's invocations. The teacher also appeals to formalized knowledge (15.38%).

Students invoked more frequently their experience (43.27%), followed by invocations to the authority of the truth (28.85%) and, finally, the authority of academic-professional knowledge (24.04%). Invocations to the truth were almost exclusively used by the students. In relation to the most frequently used categories, we highlight the invocation to the experience on the didactic-educational practice in the classroom (35.58%), the statements about the truth that are not related to present experiences (24.04%)

and the invocation of the authority of the school teacher with whom the students develop their teaching practices (10.58%) The last two categories are almost exclusively used by students.

There are also changes from the first to the fifth session in the distribution of the different dimensions and categories with respect to the overall profile (Table 5).

Table 5. Profile of invocations according to the session and the agent for case F.

INVOCATIONS	Session 1		Session 5	
	<i>f</i>	%	<i>f</i>	%
IAD Authority of academic discipline	1	1.16	1	1.75
Tutor	---	---	1	1.75
Student teachers	1	1.16	---	---
IAA Authority of the author or professional group	5	5.81	8	14.04
Tutor	3	3.49	8	14.04
Student teachers	2	2.33	---	---
IAM Authority of the school teacher	8	9.30	3	5.26
Tutor	---	---	---	---
Student teachers	8	9.30	3	5.26
IAC Formalized Knowledge	12	13.95	3	5.26
Tutor	3	3.49	3	5.26
Student teachers	9	10.47	---	---
IAGP Formalized knowledge of the group-session	9	10.47	8	14.04
Tutor	7	8.14	8	14.04
Student teachers	2	2.33	---	---
IA Academic or professional knowledge	35	40.70	23	40.35
IEI Participant's individual experience	1	1.16	2	3.51
Tutor	---	---	---	---
Student teachers	1	1.16	2	3.51
IEG Group-session experience	---	---	1	1.75
Tutor	---	---	1	1.75
Student teachers	---	---	---	---
IEP Experience on the didactic-educational practice in the classroom	11	12.79	26	45.61
Tutor	---	---	---	---
Student teachers	11	12.79	26	45.61
IEC Cultural experience of the participant or classroom group	4	4.65	2	3.51
Tutor	1	1.16	---	---
Student teachers	3	3.49	2	3.51
IE. Experiential knowledge	16	18.60	31	54.39
IVE Related to present experiences	6	6.98	---	---
Tutor	1	1.16	---	---

Student teachers	5	5.81	---	---
IVN Not related to present experiences	23	26.74	3	5.26
Tutor	---	---	1	1.75
Student teachers	23	26.74	2	3.51
IV Truth	29	33.72	3	5.26
IIV Ideology or value system	6	6.98	---	---
Tutor	2	2.33	---	---
Student teachers	4	4.65	---	---
IIV Ideology and values	6	6.98	---	---
TOTAL	86	100	57	100

Invocations of academic knowledge are introduced in both sessions with a similar frequency and weight (from 40.70% to 40.35%). The same does not happen in the rest of the dimensions. Invocations of experiential knowledge increase from the first to the fifth session (from 18.60% to 54.39%) and invocations to the authority of truth (from 33.72% to 5.26%) and value systems (from 6.98% to 0%) are reduced. In the distribution of the specific categories used in the first and the fifth session, there is an increase in the calls to the experience on the didactic-educational practice in the classroom (from 12.79% to 45.61%), to the author's authority (from 5.81% to 14.04%) and in the invitations to the authority of formalized knowledge generated in the session group (from 10.47 to 14.04%). Invocations to a general truth unrelated to present experiences (from 26.74% to 5.26%), invocations to truths related to present experiences and invocations to values or ideologies are reduced (the latter two until their practical disappearance).

If we compare both sessions for the specific case of the Practicum tutor (Table 5), the calls to the authority of an author or professional group almost tripled (from 3.49% to 14.4%). The declines focus on the categories referred to the dimensions of invocations of truths and knowledge related to ideologies. In the student teachers we observe the changes are concentrated in a reduction until the practical disappearance of the categories included in the dimensions of invocations to the truth, and to the ideologies and systems of values. In a complementary way, we observe an increase in invocations based on experiential knowledge until practically quadrupling them. The increase in this dimension is concentrated in the category of experience on the didactic-educational practice in the classroom (from 12.79% to 45.61%). The dimension referred to academic knowledge remains stable, although in the fifth session the category of use of the authority of the author or professional group increases (3.49% to 14.04%) and the use of invocations to the school teacher (9.30% to 5.26%) and the formalized knowledge (10.47% to 0.00%) decrease.

Results of case H

In the overall profile of invocations (Table 6), the most used have been those referred to the authority of academic or professional knowledge (52.90%), followed by invocations of experiential knowledge (30.90%).

Table 6. Overall profile of invocations in case H.

INVOCATIONS	<i>f</i>	%
IAD Authority of academic discipline	28	14.70
IAM Authority of the school teacher	16	8.38

IAC Formalized Knowledge	35	18.30
IAGP Formalized knowledge of the group-session	22	11.50
IA Academic or professional knowledge	101	52.90
IEI. Participant's individual experience	3	1.57
IEG Group-session experience	7	3.66
IEP Experience on the didactic-educational practice in the classroom	44	23.00
IEC Cultural experience of the participant or classroom group	5	2.62
IE Experiential knowledge	59	30.90
IVE Related to present experiences	6	3.14
IVN Not related to present experiences	22	11.50
IV Truth	28	14.70
IIV Ideology or value system	3	1.57
IIV Ideology and values	3	1.57
TOTAL	191	100

In relation to the most used categories, we highlight the invocations to the experience on the didactic-educational practice in the classroom (23.00%), followed by the invocations of formalized knowledge (18.30%) and to the authority of the academic discipline (14.70%).

This profile of invocations is different for the Practicum tutor and the student teachers (Table 7).

Table 7. Profile of invocations used by the Practicum tutor and the student teachers in case H, separately.

INVOCATIONS	Tutor		Student teachers	
	<i>f</i>	%	<i>f</i>	%
IAD Authority of academic discipline	25	30.86	3	2.73
IAM Authority of the school teacher	5	6.17	11	10.00
IAC Formalized Knowledge	11	13.58	24	21.82
IAGP Formalized knowledge of the group-session	22	27.16	---	---
IA Academic or professional knowledge	63	77.78	38	34.55
IEI Participant's individual experience	3	3.70	---	---
IEG Group-session experience	4	4.94	3	2.73
IEP Experience on the didactic-educational practice in the classroom	1	1.23	43	39.10
IEC Cultural experience of the participant or classroom group	2	2.47	3	2.73
IE Experiential knowledge	10	12.35	49	44.56
IVE Related to present experiences	2	2.47	4	3.64
IVN Not related to present experiences	4	4.94	18	16.36
IV Truth	6	7.41	22	20.00

IIV Ideology or value system	2	2.47	1	0.91
IIV Ideology and values	2	2.47	1	0.91
TOTAL	81	100	11	100
			0	

The tutor of case H, basically, appeals to the authority of academic or professional knowledge (77.78%). The most frequent categories in this dimension have been invocations to the authority of academic discipline (30.86%) and the formalized knowledge generated on the group-session (27.16%), both almost exclusively used by the tutor. For their part, the students invoked more frequently their experience (44.56%), followed by the authority of academic-professional knowledge (34.55%), and of the so-called truth (20.00%). If we analyze the production by categories, the invocation to the experience on the didactic-educational practice in the classroom stands out (39.10%). This category, moreover, is almost exclusively used by the students. This category is followed in percentages by the invitations to the voice of formalized knowledge (21.82%) and assertions of truth not related to present experiences (16.39%). In the invocation profile, depending on the session, we observe changes in the distribution of the different dimensions and categories (Table 8).

Table 8. Profile of invocations according to the session and the agent for case H.

INVOCACIONES	Session 1		Session 5	
	<i>f</i>	%	<i>f</i>	%
IAD Authority of academic discipline	11	8.87	17	25.37
Tutor	11	8.87	14	20.90
Student teachers	---	---	3	4.47
IAM Authority of the school teacher	14	11.29	2	2.99
Tutor	4	3.23	1	1.49
Student teachers	10	8.06	1	1.49
IAC Formalized Knowledge	23	18.55	12	17.91
Tutor	6	4.84	5	7.46
Student teachers	17	13.71	7	10.45
IAGP Formalized knowledge of the group-session	11	8.87	11	16.42
Tutor	11	8.87	11	16.42
Student teachers	---	---	---	---
IA Academic or professional knowledge	59	47.58	42	62.68
IEI Participant's individual experience	1	0.81	2	2.99
Tutor	1	0.81	2	2.99
Student teachers	---	---	---	---
IEG Group-session experience	6	4.84	1	1.49
Tutor	3	2.42	1	1.49
Student teachers	3	2.42	---	---
IEP Experience on the didactic-educational practice in the classroom	32	25.81	12	17.91

Tutor	1	0.81	---	---
Student teachers	31	25.00	12	17.91
IEC Cultural experience of the participant or classroom group	4	3.23	1	1.49
Tutor	1	0.81	1	1.49
Student teachers	3	2.42	---	---
IE Experiential knowledge	43	34.68	16	23.88
IVE Related to present experiences	3	2.42	3	4.48
Tutor	1	0.81	1	1.49
Student teachers	2	1.61	2	2.99
IVN Not related to present experiences	17	13.71	5	7.46
Tutor	3	2.42	1	1.49
Student teachers	14	11.29	4	5.97
IV Truth	20	16.13	8	11.94
IIV Ideology or value system	2	1.61	1	1.49
Tutor	1	0.81	1	1.49
Student teachers	1	0.81	---	---
IIV Ideology and values	2	1.61	1	1.49
TOTAL		100	67	100
	124			

From the first to the fifth session we observed an increase in the invitations to the authority of academic or professional knowledge (from 47.58% to 62.69%), and a decrease in the invocations to experiential knowledge (from 34.68% to 23.88%) and to the truth (from 16.13% to 11.94%).

In the distribution of the specific categories from the first to the fifth session, the results points out an increase of the categories of invocation to the authority of the academic discipline (from 8.87% to 25.37%) and to the formalized knowledge generated from group-session (from 8.87% to 16.42%). In relation to the categories that decrease, we can refer to the invocation to the authority of the school teacher (from 11.29% to 2.99%), the invocation to the experience on the didactic-educational practice in the classroom (from 25.81% to 17.91%) and the invocation to the truth not related to present experiences (from 13.71% to 7.46%).

If we observe both sessions for the specific case of the Practicum tutor, three of the four categories included in the first dimension increase (IAD from 8.87% to 20.90%; IAC from 4.84% to 7.46% and IAGP from 8.87% to 16.42%). In the students, we observe that the narrated personal experiences tend to diminish (IEG, IEP and IEC) from session first to fifth. Invocations to the authority of the school teacher and the formalized knowledge also decrease (from 8.06% to 1.49% and from 13.71% to 10.45%), as well as the invocations to the truth not related to present experiences (11.29% to 5.97%).

Discussion and Conclusions

Regarding the profile of the invocations incorporated into dialogic reflection, the dimensions that have been most identified, taking into account the Practicum tutor and the student teachers together, have

been in order of frequency, the reference to academic or professional knowledge, the reference to experiential knowledge and the statements based on the truth. References to value systems have been very scarce. However, this profile of the characteristic invocations in a dialogic Practicum is very different when focusing on the tutor or the student teachers separately. Thus, we observe that the first fundamentally constructs her discourse through invoking the authority of experts and academic or professional knowledge, increasing this type of invocations in the last sessions analyzed. That is, the tutors take the voice of specialists or a discipline as a voice that legitimizes their perspective on what they are arguing (Cubero & Ignacio, 2011; Wertsch, 1990, 1993).

This does not mean that students do not have a relevant role in the joint reflection process. The sessions take place with a strong presence of interventions by the student teachers, permanently invited to participate by the tutors. Their invocation profile is very active and shows a contribution to the dialogue based, fundamentally, on the teaching experience they acquire during the Practicum, combined with arguments based on academic concepts, and statements that are considered true and that are held without reference to a source of authority beyond the fact that they are introduced in discourse as an unquestionable truth. Indeed, we insist that the voice of the student teachers is possible and abundant in dialogic reflection thanks to the experience of the Practicum, which provides a validity criterion to the arguments supported by the practical evidence. Then, the fact of the teaching experience itself allows the students to have a voice and participate in dialogue. On the interactive level, this voice is possible because the tutor incorporates and legitimizes the students' voice accepting the validity of their experience (Candela, 1999; Cubero & Ignacio, 2011; Feiman-Nemser, 2008). In fact, the contrast between the first and the second analyzed session shows that the intervention profile changes in the sense we are describing, so that access to debate with authority arguments is quadrupled for cases of experiential arguments specifically linked to experiences in the course of the teaching practices during the Practicum. Consequently, the use of assertions that are introduced with the status of an unquestionable truth (a category that except in one case is only used by students), decreases radically. This means that interventions based on the voices of others (truth or academic knowledge) (Bakhtin, 1981) progress towards the student agency based on practical experience.

We can affirm that the experience provides teachers-in-training with arguments that they use to legitimize a concrete perspective of educational situations. These data have led us to three conclusions and a fundamental question. Firstly, the data from case analysis allow us to conclude that the invocation is a widespread resource in a process of dialogic reflection, and that the arguments and descriptions presented to the group, either by the tutor or by the students, have associated their own sources of validation. Secondly, the emergence of arguments based on personal experience by students reminds us of studies on the relevant sources used by teachers-in-training, who frequently dismiss academic knowledge as hardly applicable. They leave aside the knowledge learnt in the university and begin to use other conceptions that are distributed in the culture and practice of their workplace, and that they consider more useful (Clará & Mauri, 2010).

Knowledge largely based on previous personal educational experiences and beliefs about educational intervention, whose arguments are not supported by research or disciplinary knowledge, are, in fact, present and developed in teachers-in-training. Those arguments appear with a high frequency in a conversation that involves participating, describing, arguing, understanding. In fact, as we said before, it is the access to this experience that generates the voice of the students, legitimized both by the status they give to the evidence in their experience, and by the acceptance made by the tutor of this voice for actively contributing in dialogic reflection (Candela, 1999; Cubero & Ignacio, 2011). Thirdly, tutors' attitude of

integration and reformulation of experience in the light of academic knowledge has not clearly managed to promote the incorporation of concepts from formalized knowledge by the students themselves, in a generalized way. That is, the tutors’ efforts to connect pedagogical principles with personal experiences in the Practicum have not translated into student reflections in the same direction. This last data becomes a question that deserves a deeper study and an analysis of the extent to which the different sources of knowledge are treated as sources of understanding of a situation, or if, instead, in the discourse of the students some sources prevail over others.

We believe that for the socialization of student in the teaching functions, which was discussed in the introduction of this study, it is necessary to work with future teachers to reflect on the legitimacy of their claims and arguments. The Practicum, by its very nature, plays a crucial role in such a training. The tutors who are responsible for generating these reflection processes must be aware of the sources of validation that they put into play in the classroom, and of those used by teachers in training to sustain their knowledge and beliefs. If these elements are decisive in the reflection processes for teacher training, it seems obliged to pay attention to the competencies and training that the Practicum tutors need.

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